Attributes for links to external resources

General linking

Status in EAD3

For general links to external resources, EAD3 uses a **group of six attributes**, which are based on the XLink attributes used in EAD 2002:

- @href
- @linkrole
- @linktitle
- @arcrole
- @actuate
- @show

In addition, EAD3 includes the linking attributes @entityref and @xpointer, the use of which should be reviewed more generally as part of phase 2 of the EAD revision. These two attributes will hence not be discussed in more detail in this present document.

Suggestion in the draft of EAC-CPF 2.0

For EAC-CPF 2.0, it has been decided to follow EAD by removing XLink (and other external namespaces) from being part of the official schema. In this context, the suggestion has been made to **concentrate on @href, @linkRole, and @linkTitle** only for links to general resources and to **remove @arcRole, @actuate and @show**, especially as the two latter might rather be dealt with generally via a CCS used for the display on a website. This move was supported by the circumstance that there were no use cases seen for these three attributes in the context of EAC-CPF.

Recommendation for EAD 4.0

In the context of EAD on the other hand, it might be the case that @actuate and @show are used in connection with the display of digital archival objects or e.g. in connection with displaying footnotes. That being said, EAC-CPF 2.0 will also see the introduction of a functionality that allows for the inclusion of attributes from any other namespaces into the EAS to enable local specification.
One could hence argue that someone who would want to use the whole range of XLink attributes could still do so by adding the XLink namespace in their local application, e.g.:

```
<reference xmlns:xlink="https://www.w3.org/1999/xlink.xsd"
xlink:actuate="onrequest" xlink:arcrole="[...]" xlink:show="new" href="[...]"
linkRole="[...]" linkTitle="[...]">
```

Based on this, the recommendation would be for EAD 4.0 to **follow EAC-CPF** and only to support @href, @linkRole, and @linkTitle as the attributes that form part of the schema officially.

Links to vocabularies etc.

Status in EAD3

In the context of the controlled access terms as well as some of the sub-elements of <did>, EAD3 currently uses four attributes that allow for:

- linking to vocabularies as the **@source** of the term given in the element;
- linking to the **@identifier** of a specific entry within a vocabulary that represents the entity named in the element;
    - Note: there is a different use of **@identifier** in the context of <unitid> where it provides “a machine-processable unique identifier for the descriptive component in which the element appears”;
- linking to **@rules** or conventions applied in forming the content of the element
- linking to a **@relator** term specifying the “contextual role or relationship that a controlled access term has with the materials described”.

Attribute	**Available in**
@source	<corpname>, <famname>, <function>, <genreform>, <geogname> (will be <placeName>), <name>, <occupation>, <part>, <persname>, <physfacet>, <subject>, <term>, <title>, <unitid>, and <unittype>
@identifier	<corpname>, <famname>, <function>, <genreform>, <geogname> (will be <placeName>), <name>, <occupation>, <part>, <persname>, <physfacet>, <subject>, <term>, <title>, <unitid>, and <unittype>
@rules	<corpname>, <famname>, <function>, <genreform>, <geogname> (will be <placeName>), <name>, <occupation>, <part>, <persname>, <physfacet>, <subject>, <term>, <title>, <unitid>, and <unittype>
@relator	<corpname>, <famname>, <function>, <genreform>, <geogname> (will be <placeName>), <name>, <occupation>, <persname>, <subject>, <title>

Suggestion in the draft of EAC-CPF 2.0

EAC-CPF currently uses the attribute @vocabularySource (with <term>, <placeEntry>, <placeRole>) in the same way as EAD3 uses @source, i.e. to specify “the controlled vocabulary that is the source of the term contained in the element”. In EAC-CPF 2.0, this will be extended to go along with two new attributes: @vocabularySourceURI to include a “URI identifying the vocabulary source” and @valueURI to include “a URI identifying the resource to be used as the element's value”. These three optional attributes will always be available together and they will be used with a broader range of elements in EAC-CPF 2.0.

Furthermore EAC-CPF 2.0 will introduce a new attribute called @conventionDeclarationReference (see separate topic paper on “Assertion description”) “to provide a direct link to a <conventionDeclaration> element within <control> from any non-empty elements in the EAC-CPF instance. The attribute [...] can be used to link to a

national, international or other rule that governs the construction of an EAC-CPF name” or another element’s content.

Recommendation for EAD 4.0

@source

The similarity between @vocabularySource (from EAC-CPF 2.0) and @source (in EAD3) has already been mentioned above; both are meant to specify “the controlled vocabulary that is the source of the term contained in the element”. It would hence be recommended to **rename @source to @vocabularySource for precision** and to also have this attribute be **accompanied by the new attribute @vocabularySourceURI**.

@identifier

For controlled access terms and alike

Apart from the specific use case of <unitid>, @identifier is meant to include “a number, code, or string (e.g. URI) that uniquely identifies the term being used in a controlled vocabulary, taxonomy, ontology, or other knowledge organization system.” With this, @identifier seems rather close to the new attribute @valueURI. The main difference would be the data type that both of these attributes currently use: @identifier using “token”, while @valueURI uses “any:URI”, i.e. @identifier currently would allow for and be fine with spaces, while the use of spaces should probably be discouraged for @valueURI.

While this ***might need to be confirmed as part of phase 2*** of the EAD revision and based on real-life examples of using @identifier, it seems recommendable for EAD 4.0 to be more precise and to **change from @identifier to @valueURI**, which also would help to reduce confusion with the general attribute @id as well as to **adapt the data type to “anyURI”**.

For <unitid>

The use case for @identifier in the context <unitid> as “a machine-processable unique identifier for the descriptive component in which the element appears”, i.e. either <did> or potentially <archdesc> respectively a variation of the component elements, seems to lend itself to a comparison with the @target attribute. This would - following the suggestion in the draft of EAC-CPF 2.0 - be made available within all elements of the EAS (apart from the root elements) and would take the data type of IDREFS. With this, @target would include a machine-processable identifier of any other element, which by definition of the data type for the corresponding attribute @id, would be unique - ad minimum - within the same EAS instance.

It would hence be recommended to **transform @identifier within <unitid> to @target** as part of a future transformation from EAD3 to EAD 4.0. However, the **option of @valueURI should** probably **still be kept with <unitId> in parallel** as well.

@rules

The similarity between @conventionDeclarationReference (from EAC-CPF 2.0) and @rules (in EAD3) has already been mentioned above; both are meant “to link to a national, international or other rule that governs the construction of an EAC-CPF name” or another element’s content. It would hence be recommended to **remove @rules** and to **use @conventionDeclarationReference instead** alongside its sibling attributes @maintenanceEventReference and @sourceReference.

@relator

@relator is the one attribute out of this group of four that does not seem to have a direct equivalent in the draft of EAC-CPF 2.0 at the moment. There is the new element <targetRole> in the context of <relations>, which is meant to "specify the role of a related entity towards the CPF entity being described" and thereby sounds similar to what @relator is meant to be used for - specifying the "contextual role or relationship that a controlled access term has with the materials described".

Option1

TS-EAS could take the decision that specifying the role that another entity has towards the EAS entity being described, already forms part of describing the relationship between these two entities and should hence be handled within <relations>. In that case, <targetRole> could be used to house the values currently given in @relator and it would also come with the additional option to take these terms from a vocabulary and to link to that vocabulary, seeing that <targetRole> includes @valueURI, @vocabularySource, and @vocabularySourceURI.

In terms of the @targetType attribute used with the <targetEntity> element, which is a sibling element to <targetRole>, <corpname> ("corporateBody"), <famname> ("family"), <function> ("function"), <name> ("agent"), <persname> ("person"), and <title> ("resource") would already be covered by the current list of possible values. However, <genreform>, <geogname> (will be <placeName>), <occupation>, and <subject> would not have a direct representation, but would need to be subsumed under "resource" as well.

It might hence be a suggestion in the context of the call for comments on EAC-CPF 2.0 to **add to the list of possible values for @targetType ("place", "occupation", "subject/genre/topic/concept)"**, so that all controlled access elements of EAD could in theory be covered by the new shared approach to <relation>.

Option 2

Alternatively - and provided that it is considered essential to continue providing an option to "specify the role of a related entity towards the EAS entity" directly at the place within the EAS instance where the related entity is named - it could be considered to suggest **adding @relator as a fourth attribute to the group** of @valueURI, @vocabularySource, and @vocabularySourceURI.

This could be accompanied by possibly renaming the attribute to be more direct or precise. Keeping in mind that TS-EAS intends to avoid using the same name for an element and an attribute, maybe going back to simply using @role (as in EAD 2002) would be an option.

Option 3

Move decision to phase 2, especially to get encoding examples and to see whether this is mainly used with MARC relators (https://id.loc.gov/vocabulary/relators.html) or also otherwise.

General

For this first phase of the EAD revision, it would be suggested to add @valueURI, @vocabularySource, @vocabularySourceURI as well as @conventionDeclarationReference to the elements that currently use @identifier, @source, and @rules, and to use these new shared attributes instead of the current EAD3 ones. This means adding these attributes to: <corpname>, <famname>, <function>, <genreform>, <geogname> (will be <placeName>),

<name>, <occupation>, <part>, <persname>, <physfacet>, <subject>, <term>, <title>, <unitid>, and <unittype>.
Furthermore, these attributes would be added to all elements that are shared between the two EAS and where they have been made available in the draft for EAC-CPF 2.0. This adds the following elements to the list: <agencyCode>, <agencyName>, <agent>, <conventionDeclaration>, <event>, <legalStatus>, <localControl>, <localTypeDeclaration>, <maintenanceAgency>, <otherAgencyCode>, <otherRecordId>, <placeRole>, <relationType>, <rightsDeclaration>, <source>, <targetEntity>, and <targetRole>.
For the second phase of the EAD revision, we would then have another look specifically at EAD elements that might merit the use of @valueURI, @vocabularySource, and @vocabularySourceURI as well.

Challenge
There are two elements in this list, <part> (used with the controlled access terms) and <term> (used only with <localControl> in EAD3), that do not include the vocabulary attributes in the draft of EAC-CPF 2.0 at the moment. Furthermore, the list from the EAC-CPF 2.0 perspective currently includes <legalStatus>, which is an informal descriptive element in EAD3. The latter will be looked at in more detail as part of the general topic on controlled access elements to be discussed during the EAD Team meeting on 21 May, so the two options below concentrate on <part> and <term> only.

Option1
Follow the EAC-CPF approach and **only enable the vocabulary attributes with the parent elements** of <part> and <term>, which are repeatable to allow for the inclusion of several @valueURI-s or several @vocabularySource-s if applicable. This will require us to have a look at a possible transformation route from EAD3 to EAD 4.0 for cases where e.g. <persname> and its sub-element <part> would currently use @identifier and @source.

Option 2
Consider suggesting the **addition of the attributes** @valueURI, @vocabularySource, and @vocabularySourceURI **to <part> and <term>** as well.

Verification of links

Status in EAD3

In EAD3, the attribute @lastdatetimeverified is currently used alongside <term>, which comes with the attributes @identifier and @source, but not with the general linking attributes, and with <source> and <citation>, which come with the general linking attributes. It is, however, not used consistently with the controlled access elements or others using @identifier and @source, and it also is not used with <ref> or <dao> that use the general linking attributes. In EAD3, @lastdatetimeverified currently is restricted to dates including the year 2099 as the latest possible value.

Suggestion in the draft of EAC-CPF 2.0

The draft for EAC-CPF 2.0 includes @lastDateTimeVerified with <representation>, <source>, <reference>, and <contactLine>, i.e. only with those elements that use the general linking attributes. In EAC-CPF, the definition of the attribute @lastDateTimeVerified is not restricted to the year 2099.

Recommendation for EAD 4.0

It would be recommended for EAD 4.0 to **consistently use @lastDateTimeVerified with all elements that can include external links of some type**, i.e. alongside the general linking attributes as well as alongside the vocabulary attributes, and to relax the data type of the attribute. It would furthermore be recommended to **suggest** the same for EAC-CPF 2.0, i.e. **for EAC-CPF 2.0 to extend the use of @lastDateTimeVerified alongside the vocabulary attributes**.